



**An Internship Report on**  
**“Role of Information and Communication Technology in Tourism**  
**Development of Bangladesh: A Study on Bangladesh Tourism Board”**

*Internship Report Presented to the Faculty of Business and Entrepreneurship in Partial Fulfillment of the Requirements for the Degree of Bachelor of Tourism and Hospitality Management.*

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**Date of Submission:** 30 July 2022

## LETTER OF TRANSMITTAL

30 July 2022

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**Subject: Submission of the internship report on “Role of Information and Communication Technology in Tourism Development of Bangladesh: A Study on Bangladesh Tourism Board”**

Dear Sir,

I have the honor to state that I am a regular student of the 14<sup>th</sup> batch of our respective Tourism and Hospitality Management Department, Faculty of Business and Entrepreneurship, Daffodil International University, and had the prerogative opportunity to complete my internship report under your mentorship. It has been both a great privilege to act under your direction but also a challenge for me to work on this particular topic. I will never be able to reimburse your contribution throughout the process. I strive my hardest to collect and analyze the data and propagate the acquired report according to your ordinances on “**Role of Information and Communication Technology in Tourism Development of Bangladesh: A Study on Bangladesh Tourism Board.**”

I would humbly like to offer my deep gratitude and reverence for your supervision in the preparation of the report. I apologize in advance if this report has any unintended errors. I will be happy to respond to any questions you may have as they arise. I thank you for providing me with this great opportunity.

Sincerely yours



.....  
Md. Nayon Hossain

ID: 182-43-340, THM 14<sup>th</sup> Batch

## Certificate of Approval

This is to certify that the internship report on “**Role of Information and Communication Technology in Tourism Development of Bangladesh: A Study on Bangladesh Tourism Board**” for the award of the degree of Bachelor of Tourism and Hospitality Management, Faculty of Business and Entrepreneurship, Daffodil International University is carried out by Md. Nayon Hossain, ID – 182-43-340, THM 14th Batch under my supervision.

This report adheres to the subject title and conveys all of the requirements that are stated to prepare an academic document like this. I reviewed the full report and deemed it to be well-written. It is also essential to mention that this internship report has never been published nor acknowledged for a degree, diploma, title, or other forms of distinction. I openly concede this report as the culmination of my internship program in the Department of Tourism and Hospitality Management.

I wish him success and prosperity.



.....

Md. Golam Mostofa

Assistant Professor

Department of Tourism & Hospitality Management

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Daffodil International University

## Declaration of The Student

I, Md. Nayon Hossain, declare that this internship report “**Role of Information and Communication Technology in Tourism Development of Bangladesh: A Study on Bangladesh Tourism Board**” has been written through data gathering and analysis by me in the year 2022 under the keen guidance of my internship supervisor Md. Golam Mostofa, Assistant Professor, Department of Tourism and Hospitality Management, Faculty of Business and Entrepreneurship, Daffodil International University.

I am also stating that the task I have submitted does not infringe on any prevailing copyright and that no part of this internship report has been plagiarized from any previous degree, diploma, title, or any distinctive academic-proclaimed writings. I have also conserved the department from any potential damages and inconvenience resulting from my failure to comply with the preceding commitment that is tied to this report.

Nayon

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## Acknowledgment

First of all, I would like to express my gratitude to the almighty ALLAH for giving me the strength to perform my responsibilities as an intern and complete the report within the stipulated time.

I am deeply indebted to my respected supervisor, Md. Golam Mostofa, Assistant Professor, Department of Tourism and Hospitality Management, Faculty of Business and Entrepreneurship, Daffodil International University, for allowing me to work during my internship report. I have comprehensively completed this report. I have tried my level best to prepare the report according to her direction and instruction.

I am also grateful to Md. Mazharul Islam, Assistant Director, Bangladesh Tourism Board, It would have been very difficult to prepare this report up to this mark without his guidance.

This report is full of information about the **“Role of Information and Communication Technology in Tourism Development of Bangladesh: A Study on Bangladesh Tourism Board”**. I was working with Bangladesh Tourism Board during my internship period and the overall experience of working was full of learning. So I would like to give credit to the CEO of the Bangladesh Tourism Board and his Team for the information and cooperation.

## **Executive Summary**

The growth, prosperity, and sustainability of the tourism industry are heavily impacted by supporting industries such as hotels, transport, telecommunication, finance, to an extent, information technology (IT), and of course, communication technology. In today's world, Information and Communication Technology (ICT) plays a critical role in almost every industry. Information and Communication Technology has enabled diverse process reengineering in the tourist business, making it critical to the industry's success. It has brought with it lots of new difficulties and opportunities for business and tourism. Anyone may now obtain worldwide data in a fraction of a second due to the internet. Frequent technology upgrades introduce new trends in several sectors, all of which tend to improve significantly in their particular domains. The usage of ICT in tourism-related businesses has increased tremendously in recent years. Tourism is now one of the world's fastest developing sectors. Because it provides services to a wide range of individuals, it is primarily a service industry. As a result, it is mostly an information product. This report describes how ICT is effective in tourism, the benefits and drawbacks of ICT for tourists, and ICT's new ideas.

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# **Chapter 1**

## **Introduction**

# 1 Introduction

It has not been long since Bangladesh has transitioned from an underdeveloped country to a developing country with a strong presence in the sector of Information and Communication Technology (ICT). With a significantly constructed tourism ministry, the tourism industry here is one of Bangladesh's most important assets and the seed of uncountable future opportunities. It is expected to increase as a result of advancements in technologies as they are updated as well as the ICT aka Information and Communication Technology conveniences. Information and Communication Technology has had a significant impact on the tourism sector since the 1980s. According to Porter, 2001, industrial rules and systems have undoubtedly improved since Information and Communication Technology's introduction. The Internet and the growth of Information and Communication Technologies have revolutionized the whole tourism and hospitality sector, creating new business aspects and opportunities for businessmen and entrepreneurs, even jobholders. Another reason for that is modifying the structure of tourism (destination and leisure) distribution outlets, and redesigning every other old process all over the world. Information and Communication Technology has made tourism-related activities quicker for travelers than before. Nowadays, consumers like families, student groups or business travelers, gather necessary information about traveling decisions from the internet. The tourist sector relies heavily on information (Biplab & Ahmed, 2019). Tourist experts can use it to determine the borders of a planned tourist attraction, as well as the surrounding areas and towns.

The Bangladesh Tourism Board (BTB) has launched many programs on YouTube in cooperation with a2i (Access to Information) to promote and raise awareness about Bangladesh's tourism and hospitality sector. The Bangladesh Tourism Board (BTB) and the Bangladesh Parjatan Corporation (BPC) want to be responsible for providing all these online services for tourists including information about all of their hotels and motels, and online booking, payment, as well as upgrade options, and premium facilities. Bangladesh Tourism Board has also set up a "Grievances Redress System" (GDS) to attain information, and feedback and accordingly deal with complaints (Yearly Report 2020-2021, BTB).

One-third of the population of Bangladesh is identified as a youth group (Matin et. al., 2019). This age group has a high level of interest when it comes to technology, which impacts other age groups (Untrain et al., 2020) The number of tourists between the age group of 20-30 who are visiting Bangladesh is steadily rising (Parvez & Kashem, 2018), and they are, by the

generation demand, obsessed with tours, comfort and technology drives destination, travel and related accommodations operators to make their destinations Modern technology efficient. Information and Communication Technology adoption and adaptation has a far impacting influence on ensuring long-term as well as globalization and tourism growth, particularly in developing countries like Bangladesh (UNCTAD, 2004)

Tourists are becoming more self-reliant and excited about a wide range of resources for arranging a trip. So it is the best time to engage with Information and Communication Technology and figure out how it can help Bangladesh compete in the tourism and hospitality industries with other nations across the world.

## **1.1 Background of The Study**

An internship program is developed for Business and Entrepreneurship graduates of the Daffodil International University's Bachelor of Tourism and Hospitality Management degree who have completed the course and want to gain experience in the practical application of theoretical information covered in the course curriculum. Under the direction of Md. Golam Mostafa , Assistant Professor, this report was completed to meet the course's requirements. This paper was written as a part of the FBE program and is titled "Role of Information and Communication Technology in Tourism Development of Bangladesh: A Study on Bangladesh Tourism Board." On the 1st of January 2022, I commenced my six-month internship at the Bangladesh Tourism Board, and after the program, I am submitting my internship report focused on the role and influence of information and communication technology in tourism development. In this paper, I have attempted to obtain and accumulate theoretical knowledge initially, followed by operational and practical knowledge in various areas of the Bangladesh Tourism Board's Information and Communication Technology applications. This gives me a rational analysis and in-depth understanding of the function of information and communication technology in tourism.

## **1.2 Scope of The Study**

The aim of the study is to discuss the strategies to develop the tourism industry of Bangladesh. The study also focuses on finding out the challenges of our tourism industry. Bangladesh Tourism Board, which was recently established, is responsible for promoting and marketing Bangladesh tourism both locally and globally. The organization helps with the creation of tourist strategies and policies and the promotion of foreign investment in the industry. As a Bachelor's student in Tourism and Hospitality Management, I always wanted to complete my

internship program in a tourism-related organization where I would be able to share my ideas regarding tourism development and also observe their activities. There were a lot of opportunities to explore and learn about the tourism sector. They were also eager to listen to our ideas on how to further develop this sector. They were very cooperative while interviewing. As I always wanted to prepare my internship report on ways to further the development of the tourism sector and strategies to apply, selecting the Bangladesh Tourism Board for completing my internship program was absolutely right.

### **1.3 Objectives of The Study**

The primary purpose of the research and analysis of this report is to discern the many functions that Information and Communication Technology play in the advancement of the tourism and tourist accommodating hospitality sector.

**The specific objectives are:**

1. Recognize the significance of ICT in the tourism industry.
2. To identify the ICT applications in the tourism sector by Bangladesh Tourism Board.
3. To look into the influence of ICT on the tourism industry.
4. To make recommendations for ICT implementation in the tourism sector.
5. To find the gaps in the level of usage of ICT the tourism industry in Bangladesh.

### **1.4 ICT Applications by Bangladesh Tourism Board in Tourism**

#### **Development of Bangladesh**

Bangladesh Tourism Board which operates under the tourism ministry is a National Level Tourism Organization of Bangladesh. It is responsible for preserving, renovating, and marketing tourist destinations as well as facilities and accordingly employing then providing them necessary training to do so. The Board is taking the lead in promoting and marketing Bangladesh tourism both at home and abroad. And the main thing is for promoting tourism both at home and abroad they need to implement Information & Communication Technology in their day to day work as we are living in the modern age and technology has been advanced through the years. As Bangladesh is a developing country there are many opportunities for Information and Communication Technology to take a major role in the development of tourism of Bangladesh. As a National Tourism Organization, Bangladesh Tourism Board has

applied some Information and Communication Technology functions for promoting and welfare of the tourism of Bangladesh. Some steps they have taken are discussed below:

1. **Virtual Tourism Fair:** Bangladesh Tourism Board has attended many virtual tourism fairs last year. For example, Reconnect Program, SATTE Genx, etc. Here many discussions have been made to promote tourism alongside with manner country's to countries negotiations. Many tourism products and cinematography of Bangladesh were presented.
2. **E-Visa:** For earning foreign currency, we need to attract more foreign tourists. And for that, the Ministry of Civil Aviation and Tourism has taken substantial steps for e-visa and arrival visas for the regional tourism development with the desired market countries.
3. **Digital Marketing Campaign:** To highlight the tourism of Bangladesh, Bangladesh Tourism Board is maintaining a campaign named "Beautiful Bangladesh" many times. But in digital media, this campaign has started to maintain its regularity since May, 2010. As a part of this campaign, many pictures and video has been published in ton main social media platforms to promote tourism. Besides, travel blogs in English, animation videos, and travel shows are regularly published by the Bangladesh Tourism Board to connect with the followers. The main activities of the Beautiful Bangladesh campaign are: Let's explore Beautiful Bangladesh, Food week, River week, Hills week, etc. are significant. On the Facebook page of the Bangladesh Tourism Board, the number of likes is 4,13,043 and the follower's number is 4,14,000. 523 posts have been done already with the coordination of pictures, video, and article content. The YouTube channel has 11,200 subscribers and 401 videos. The follower's Instagram are 4,979 and on Linked-in 462. Alongside, 393 pictures have been pinon in Pinterest.
4. **Grievance Redress System:** The Grievance Redress System is a platform through which citizens can send a formal complaint to the government to express their dissatisfaction with public service providers. It is designed to identify ways to improve service delivery, improve transparency, and increase accountability among service providers at the local level. Bangladesh Tourism Board has also introduced the grievance redress system in September 2020, so that tourists can complain about their dissatisfaction. And it will be a great platform to improve the service of tourism.
5. **Tourist Information Center:** A tourist information center has been established at Hazrat Shahjalal International Airport to provide help to foreign tourists. Here the

executives will provide help to the tourists to find the tourism attractions, tourist services, brochures etc. Besides, foreign tourists can access the WIFI, they can charge their devices, can call their relatives in their countries, and buy tourist sims of Bangladesh.

6. **Tourism Data Bank:** For promoting and expanding the tourism of Bangladesh, the Bangladesh Tourism Board has made many contents. They are:
  - Stockholder-related information;
  - Video documentary, online video content on tourist attractions;
  - 360 Degree photo and video;
  - Newsletter and e-news-letter.
7. **Beautiful Bangladesh Website:** Beautiful Bangladesh website is created and managed by the Bangladesh Tourism Board. Here both local and foreign tourists can find destinations of Bangladesh according hills, river, sea-beach, food, culture. Here one can also find out the accommodation, plan the tour and find information about the destinations. There is also an option to reserve a hotel, cab etc.
8. **Photography & Videography:** Bangladesh Tourism Board has been arranging many photography and videography competitions around the country on the tourist destinations and beauty of Bangladesh. From those competitions, the best photos and videos get placed in the exhibitions on both online and offline platforms.
9. **Search Engine Optimization:** SEO stands for "search engine optimization," and it refers to a set of approaches for optimizing the appearance and positioning of web pages including websites, web articles and any informational web address in originated search results. Because search engine optimization (SEO) is the most popular means for tourists to find and access online content, a successful SEO strategy is essential for increasing the quality and quantity of visits to the Beautiful Bangladesh website. They also perform SEO regularly.
10. **TVC:** Television commercials are one of their main promoting strategies for Bangladesh's tourism. They are making many TVCs in many aspects, branding the TVC name Beautiful Bangladesh.



## **1.5 Limitations of The Study**

It is not a simple job to write a report on the topic. The following are some of the issues and limitations that were discovered while creating this report:

- ✓ The main constraint of the study was the insufficiency of information and authentic information.
- ✓ This is the first time I've done something like this. As a result, one of the major factors that defined the study's limitations was inexperience.
- ✓ One of the study's limitations in writing the report was time limitation.
- ✓ Other facts may be kept in protecting the board's privacy.
- ✓ Employees are not sincere.

# **Chapter 2**

## **Literature Review**

## 2 Literature Review

Because information is the soul of tourism (Poon, 1993). Information technology (IT) and Communication Technology has a significant influence on business. Information and Communication Technology increases the efficiency and efficacy of customer service, trade, and product design processes by allowing direct connection with clients. At the same time, Information and Communication Technology makes competitiveness more difficult and necessitates ongoing expenditures. Information and Communication Technology and the combined of these fields called ICT opens new distribution channels and gives new tools. It encourages tourism-related developments and the other way around. E-tourism has emerged as a result of technological advancements. These constant changes necessitate the acquisition of new abilities. The following two domains, which are highly impacted by Information and Communication Technology development and related skill demands, are explored in this contribution: Electronic commerce and revenue management are two aspects of financial management.

The most significant benefit of Information and Communication Technology is the improved accessibility of information to a growing number of individuals, as well as lower production costs due to improved efficiency (Jorgenson et al., 2003). Knowledge is generated, distributed, and generally available (David Rooney et al., 2005). Participants in the market exchange information, specifications, and the manufacturing process across national borders resulting in increased transparency and reduced pricing. Similarly, Information and Communication Technology allows businesses to access a variety of marketplaces and a number of sets of customers as well as to employ global supply chains in a straightforward and acceptable manner. Despite the fact that Information and Communication Technology has a significant influence on all industries, tourism is one of the most vulnerable to it (Shanker, 2008).

Tourism is currently one of the world's fastest developing sectors. Tourist arrivals increased at a rate of 4.3% per year on average over the world, contributing greatly to GDP growth. According to the World Tourism Organization (WTO), more than one billion individuals were expected to travel outside their nation (international travelers) in 2010, and international tourist arrivals in the Asia-Pacific region are expected to increase by more than 400 per cent by 2020, the expert's calculative anticipation states that the number of foreign arrival in the Asia Pacific stands 105 million in 2002, which is to multiply and stand to 438 million in 2020 (Gupta V., Gupta D., 2008). Information and Communication Technology (ICTs) have had a significant impact on how businesses are conducted and organizations compete during the last few decades

(Porter 1985, 2001, Porter and Miller 1985). These innovations and technological advancements have a vast influence on the tourism industry, particularly in terms of how organizations improve and facilitate their tourism offerings, both tangible and intangible, in the relevant marketplace (Buhalis, 2000; Buhalis & Licata, 2002; Sheldon et al., 2001).

Airlines, tour operators, and travel agencies all make significant investments in e-ticketing. Hotels, motels, and resorts, for example, use information and communication technology to build and sustain alliances as well as relationships with their visitors/guests and distribution channels, as well as to make the booking process quick and efficient.

Since its early use in the 1990s, the Internet and related technologies have developed, with the introduction of search engines allowing customers to review services significantly more quickly and effectively. As a result, customers' travel plans, bookings, visitor expectations, and the manner they review their experiences for future consumers to assess have all changed. Review websites, organizational website design and systems, adoption and adaptation for mobile technologies

The Internet and related technologies have evolved since its early use in the 1990s, with the emergence of search engines allowing customers to assess services much more rapidly and effectively. Customers' travel plans, bookings, visitor expectations, and the way they review their experiences for future consumers to evaluate have all altered as a result. Review websites, organizational website design and infrastructure, and mobile technology acceptance and adaptation. Also, user generated content, and the possibility for future methods of tourism consumption are all related internet technologies that affect tourism and hospitality operators.

It serves as a global corpus of state-of-the-art Information and Communication Technology Travel and Tourism research, with approximately fifty papers (Marianna et al., 2007). On the theme of "e-Tourism: The View from the Future," Connor et al. reflect cutting-edge research (Peter et al., 2008). The papers presented at the ENTER 2008 conference cover a wide range of cutting-edge topics in IT and travel and tourism, such as online communities, user-generated content, recommender systems, mobile technology, platforms and tools, website optimization, electronic marketing, ICT and tourism destinations, and technology acceptance (Wolfram et al., 2009). Unique product distribution and value-added chains can be built since tourism and hospitality products integrate a variety of activities and information (Klein, 1999). Information and communication technology, particularly computer networks, have been used in the tourist and hospitality industries for more than 30 years, with the first major application being the

building of central reservation and booking systems for airlines. Sabre, Galileo, Amadeus, and world span are examples of global distribution systems (GDS) that are used for this purpose (Gomis et al., 2012). The adoption of the Internet by the tourism and hospitality sectors in the 1990s and beyond is the next significant transitional technology. Despite the fact that the travel and tourism industry was the first to introduce Computerized Reservation Systems (CRS), the introduction of Global Distribution Systems (GDS) and its access to intermediaries pushed the industry to become one of the most successful in e-commerce due to its consumer-oriented and information-seeking nature. Information and Communication Technology promotes this integration and allows tourist offerings to be customized to meet the demands of specific persons.

The primary obstacle for tour companies and destination/accommodation service providers is to interpret and understand the changing tourism consumer (tourists, visitors) behavior, with each potential tourist relating to multiple market segments at the same time, and to equip themselves to respond to market needs, wants, and markets dramas and supply by furnishing precise, regionally categorized data, through progressive IT configuration, while simultaneously preserving the related alliances and relationship with the tourist (Pease & Rowe, 2005).

Information and communication technologies are quickly becoming a critical component of organizational competitiveness and productivity, assisting the tourism industry in expanding its market share and offering new products. This article focuses on the use of information and communication technologies to improve the benefits of the tourism business. Given the importance of information and communication technology in this business, the purpose of the research presented in this report is to look at the impact of ICT adoption and use on the tourism industry in Bangladesh. The goal of this research is to see how information and communication technology affects Bangladesh's tourism industry, as well as its level of innovation and productivity, based on the tourism sector of Bangladesh: accommodations, public and personal transit, infrastructure, and travel operator, among other things.

## **2.1 Information and Communication Technology and The Tourism Industry of Bangladesh**

Human daily lives have been altered by the use of Information and Communication Technology in communication infrastructure. Digitization, User Generated Content (UGC) and feedback, consolidation of other social media, worldwide placement of offerings, and Artificial Intelligence (AI): all of these play an important part in shaping individuals' spending habits and decisions making as well as information exchange. Continuous improvements in Information and Communication Technologies and smart devices such as computers, databases, networks, the Internet, wireless technologies, Global Positioning Systems (GPS), or cellular communication like smartphones, and other smart gadgets make this feasible. Information and Communication Technology brings new problems and opportunities for tourist and leisure establishments, and several other categories of enterprises (Law et al., 2014). Facilities like Banking, retail, and healthcare services are now at the fingertips of everyone who owns smart devices now not just limited to smartphones. It can be any machine with an internet connection.

This is made possible by the accelerated expansion of the Internet and Web 1.0, to the extension of Web 2.0 or the social media ecosystem, which has altered every part of life, particularly tourism and hospitality (Buhalis et al., 2019). Tourists aware of the availability are putting pressure on tourism and hospitality management authorities to provide innovative services and improve customer satisfaction. As a result, tourist and hospitality service providers must approach service reconfiguration in their tactical and analytical administration with the active help of information technology. However, despite its enormous significance and large-scale possibilities in the tourist and hospitality business, Bangladesh is still at a very preliminary phase in implementing the groundbreaking possibilities of ICT (Vihara et al., 2020).

"Digital Bangladesh" has always been the dream or the ultimate vision of a future where Bangladesh would be a developed country and the key to it is ICT today, Digital facilities are available through Post-E-Center and Union Digital Centre in rural areas. The ICT sector is enhancing at an accelerated pace at an estimated 20% per year. In 2019, the industry provided 1858.9 million jobs in Bangladesh, accounting for 2.9% of total employment and 3% of GDP (Poole & Misrahi, 2020). These visitors go to various locations, stay in various hotels and motels, and demand modern ICT amenities. Tourism and hospitality management are increasingly using ICTs to complete their business operations as the need for intelligent clients grows. Bangladesh must be worried about the current choice and tour planning behavior of visitors/tourists if it is to prosper and continue in tourism rivalry with its neighboring nations.

Bangladesh established an Information and Communication Technology policy in 2009 (BTRC, July 2009), and ICT was identified as a tool for transformation. Bangladesh has made significant contributions to ICT in the previous ten years (Jacob & Groizard, 2007).

Numerous Bangladeshi businesses (both private and public) are improving their skills by utilizing various hardware, software, and other ICT resources. Tourists now plan their trips in advance, beginning with a search for information on the particular destination and lodging, followed by an attempt to communicate with the relevant authorities, and ultimately, reserving the destination or lodging. The entire procedure is carried out using Information and Communication Technology from beginning to end. Tourism operators make essential content accessible in an online database, and tourists use technology to connect with one another and organize their tours. Tourists, particularly business travelers who want ICT services while staying in a hotel, have issues throughout their stay due to a shortage of ICT services (Cristiana, 2008).

They prefer to use smartphone apps to get destination knowledge, make hotel reservations, and check in and out. To improve the client's opportunity to pursue a market advantage, local authorities must mix Information and Communication Technology. Furthermore, employing a worldwide network, service receivers throughout the world might readily locate industrial services and connect them via ICT, improving productivity. As a result, tourist and hospitality professionals should develop their services using ICT in order to achieve consumer happiness. Nonetheless, in Bangladesh, the structure of such deployment has yet to be investigated. Bangladesh's young account for one-third of the total. This age range has a high level of crazy when it comes to technology, which impacts other demographic groups (Moscardo, 1998).

The percentage of youth visitors visiting Bangladesh is steadily rising, and the obsession with tourism and newly developed technologies compel tour and destination operators to improve their destinations and make them more technologically advanced and up to date. Regrettably, hospitality operators lack enough expertise in ICT applications. As a result, this field of study is being examined for detecting use correlations and distinguishing elements of ICT implications in Bangladesh's tourist and hospitality industries (El-Gayar & Fritz, 2006).

## **2.2 Role of Information and Communication Technology in Developing Sustainable Tourism in Bangladesh**

Poor social relationships and social, micro-macro-economic, and cultural implications are unavoidable in the tourist and hospitality industry, as in any other service-based company. Some may be inevitable and long-lasting. Experts are still arguing how to achieve a balance between economic development and environmental protection. The threat of global climate and weather change to the tourism and hospitality industry is likely to exacerbate these already existing issues. The tourism sector has included environmental sustainability into its strategies and goals in response to these concerns. The establishment of a long-term tourism sector may become another feasible and beneficial idea in tourism planning and hospitality services with the use of Information and Communication Technology (Choi & Sirakaya, 2006).

The potential of Information and Communication Technology to assist tourist management in making better decisions is mostly untapped and unrealized. A decision-making process that focuses on the most effective distribution of resources in the shortest amount of time while satisfying all parties involved is the cornerstone of sustainable tourism development. Location administrations that have excellent procedures for investigating and evaluating environmental parameter data and information can help to encourage development and make areas more environmentally sustainable. Computer simulation, Destination management systems, Economic impact analysis software, Environment management information systems, Geographical information systems, Global positioning system (GPS) and computer simulation (Buhalis & O'Connor, 2005).

Destinations are currently under a lot of pressure to include environmental considerations into their operations. Destinations must employ Information and Communication Technology tool converted into Information Technology specialized eco-efficient, and ecologically imaginative as well as innovative in business operations in order to achieve Sustainable Tourism Development. If the target vision is interrupted and hampered, destinations may face financial and environmental costs. This table showed how Information and Communication Technology may be used to achieve a range of goals in convenient e-tourism development that sustains itself so that it can be used to improve existing approaches like visitor management tactics and indicator creation. Despite the fact that studies on these ICT-based tools and equipment with related applications and their functions partake after the theory and research, they have not been fully studied from the standpoint of achieving sustainable tourism in the background of Bangladesh (Moore, 2001).



The need for Geographical Information Systems for monitoring and recording visitor travels pattern and marketing as well as specially trained expert opinions like the use of computer simulation in operating the Karnaphuli plant and as an attraction, have all been looked into (Manning, 2005). As a result, this study contributes to a better understanding of Information and Communication Technology sustainable tourism development. This concern has real-world implications for tourism and industry stakeholders. Destination managers may evaluate their tourism-related challenges and choose the best ICT-based solutions and apps to assist them (Lau & McKercher, 2006).

Climate change, global warming, greenhouse gas, natural calamities, pandemics and in the midst of it, the transportation for tourism, in particular, are becoming more "alarming" concerns and destinations, leisure accommodation where Information and Communication Technology could help lessen unfavorable tourism impacts, although receiving little attention in the tourism literature. Additional possible study areas for sustainable tourism development have been added to this list. Long-term productivity is dependent on water supply and use, as well as wastewater treatment. The managers and related stakeholders including the customers on this very account at ICT tools functions and applicability from the standpoint of Destination Management Organizations, as well as the use of Information and Communication Technology by individual tourism businesses at the destination. Consumer attitudes and motives to explore a site employing technology to present it more environmentally friendly could be profitable. To promote sustainable tourism development concepts, it could turn out to be vital to look into how clients utilize the Internet.

Furthermore, this concept emphasized the execution of Information and Communication Technology on a broader platform, in extension, to global platforms. Clean technologies were not promoted as part of the sustainable tourism development approach. It should be researched further in the context of Bangladesh particularly, as well as its applications in the tourism industry. Based on this study, a longitudinal study focusing on specific destinations that use Information and Communication Technology for sustainable tourism development and determining how these innovations are applied to utilize the concept of innovation diffusion might be developed. The focus of research might be on evaluating area authority and affiliated businesses need and access to this technology to monitor, control and instigate sustainable tourism development using Information and Communication Technology (Rogers, 1983).

Regardless of the fact that sustainable tourism development and e-tourism are hot topics in academia, information transmission to tourism professionals has been slow (Ruhanen, 2008). The expertise offered here, for the sole purpose of developing a sustainable tourism sector, will be disseminated meant for the sector, in addition to that, it would implement Information and Communication Technology tools to improve industry administration, so treating many of the ill destinations that have long been afflicted. The companies theorize that somehow this activity has depicted the current state of Information and Communication Technology -sustainable tourism development research and established the groundwork for future due diligence initiatives to strengthen this level of information and the hypothesis model of Information and Communication Technology and sustainable tourism. Destination-based sustainable tourism development using Information and Communication Technology, expecting strongly, the outcomes would be benefitted by destinations, hotels, attractions leaders, visitors and of course, Destination Management Organization.

# **Chapter 3**

## **Research Methodology**

## **3 Research Methodology**

### **3.1 Methodology of The Study**

The research work will be conducted using the Quantitative method as I am working as an intern at Bangladesh Tourism Board (BTB). To know the details, my selected subject will be identified in this report by providing company information, feedback via a survey of 70 respondents by google form and other relevant secondary information.

### **3.2 Data Collection Method**

Researchers and analysts obtain the raw and related data through two most reliable methods. They are –

- **Primary Sources of the data as follows –**
  - ✓ Face to Face interview with the AD and ICT executives of Bangladesh Tourism Board (BTB).
  - ✓ The survey questionnaire will provide information on people's perceptions about ICT's role in tourism growth.
- **Secondary Sources of the data are as follows –**
  - ✓ Book
  - ✓ Journals
  - ✓ Articles
  - ✓ Magazines
  - ✓ Bangladesh Tourism Board yearly report 2020-2021

### **3.3 Data Processing and Analysis**

Information for the report is gathered from various sources, processed, and then completed using Microsoft Word, Microsoft Excel, and other computer-related software. Data collecting is utilized to create graphs, and statistical techniques are used to assess the importance and relationship of the data obtained to the main issue.

# **Chapter 4**

## **Organization Profile**

## 4 Organization Profile

### 4.1 Bangladesh Tourism Board

Bangladesh Tourism board falls under the area of control of the tourism ministry. In 2010, the private sector and the tourism professionals had strongly demanded the centralization of the recurring information systems. It was required that communication and data storing must be synchronized nation-based. Thus the BTB started its journey as the National Tourism Organization of Bangladesh. This organization has been established based on Bangladesh Tourism Board (BTB) Act-2010. The board is working with the objective to promote Bangladesh tourism at home & abroad and make contact with the foreign tourism organization as well as attract foreign investment in the tourism sector.

Bangladesh Tourism Board is a non-governmental organization (NGO) that is public-private cooperation. It has a 17-member governing body, five of whom are from industry organizations such as the Bangladesh Tour Operators Association, Bangladesh Tourism Developers Association, Bangladesh Association of Travel Agents, academics and researchers, and women representatives. Their respective ministries have ten members. The Chairman of the Governing Body is the Secretary of the Ministry of Civil Aviation and Tourism. The Member-Secretary and Administrative Chief's job is to put the Governing Body's decisions into action, as well as everything else related to tourism.

Bangladesh Tourism Board, a leading promoter of the country's tourism, is trying to play its role as National Tourism Organization with certain limitations. The recruitment process and other necessary official equipment are yet to be procured. Meanwhile, a Joint Secretary to the government is working as the CEO of the Board on deputation. Other ten officers are attached from BPC and one from Civil Aviation Authority is trying to mobile the board with their highest capability and effort.

**The board was given broad power and authority as follows:**

- Controlling and regulating tourist facilities and services.
- To promote the image of Bangladesh abroad in order to attract tourists by showcasing the country's history and culture.
- To set up information centers in and outside of Bangladesh.
- To promote and expand domestic tourism.

- To conduct and carry out research on a variety of tourism-related topics.
- To collect and publish tourism-related literature and art.
- To create plans for instruction and training for those who are engaged, or who are expected to be engaged, in any tourism-related or ancillary activity.
- To do any other duties that may be assigned.

## **4.2 Vision, Mission, Goal and Strategies of Bangladesh Tourism Board**

### **Vision**

“Creating awareness among people about responsible tourism”

### **Mission**

- ✓ Identification, conservation and development of tourist destinations in Bangladesh.
- ✓ Making a good relationship with different foreign countries to cooperate about travel and tourism to build sustainable tourism.
- ✓ Establishing different training institutes to develop the manpower of the tourism. and the hospitality industry.
- ✓ Ensuring the participation of physically challenged tourists.
- ✓ Protection of women’s rights and participation in tourism.
- ✓ To develop BTB as an organization of excellence with adequate authority and capacity to regulate the tourism industry in Bangladesh.
- ✓ To develop and maintain international standard tourism products.
- ✓ To involve the government in developing physical infrastructure and superstructure. i.e. road, air and waterways for easy accessibility.

### **Goal**

“Develop Bangladesh as an exotic tourist’s destination”.

### **Strategy**

Bangladesh Tourism Board has taken some strategies to promote Bangladesh all over the world by organizing national and international fairs, seminars awareness programs and roadshows.

Furthermore, it is now undertaking new projects, conducting workshops for the development of the tourism sector in our country.

### **4.3 Responsibilities of Bangladesh Tourism Board**

The main goal of BTB is to develop the tourism of Bangladesh through various planning and research activities and to promote Bangladesh both nationally and internationally through different marketing and promotional activities. In order to fulfil the goal, BTB has to perform some function responsibilities. The functions responsibilities of BTB are the following:

- ✓ To create numerous rules under the law with the main goal of filling in the gaps in existing tourism laws and allowing regulations to move forward.
- ✓ To grow the tourism industry through a variety of planning-related activities while also providing guidance and directions.
- ✓ To raise public understanding about the importance of tourism conservation, development, and discovery.
- ✓ To carry out responsible tourism by enlisting the assistance of the private sector, local people, local government, non-governmental organizations, women's federations, and the media on behalf of the government.
- ✓ To improve contact between international tourist organizations and government and private tourism-related entities in Bangladesh.
- ✓ To establish a strong and secure foothold for Bangladeshi tourists by collaborating with relevant government agencies.
- ✓ To establish a tourism-friendly environment in Bangladesh and to promote the country's tourism potential both at home and abroad.
- ✓ To develop human resources for the tourism industry by establishing training facilities and providing them with appropriate guidance.
- ✓ Attract tourists by keeping high-quality, relevant material, which may then give a smooth tourism service while also ensuring that necessary maintenance measures are completed.
- ✓ To ensure that persons who are physically challenged can participate.
- ✓ Women's rights must be protected, and women must be able to participate in the tourism industry.
- ✓ To conduct research into the tourism business, as well as to survey and evaluate data from worldwide markets.



- ✓ To assist small tourism-based businesses and steer them in the proper route.
- ✓ Organize tourism-related fairs and promote tourism using a variety of promotional strategies.
- ✓ To compile a database of potential tourism destinations.
- ✓ To carry out any duties set by the government.

#### **4.4 Activities of Bangladesh Tourism Board**

BTB mainly performs three categories of activities for the development of the tourism industry of Bangladesh. The activities are:

- Research and development
- Tourism development
- Promotion and marketing

# **Chapter 5**

## **Data Analysis**

## 5 Data Analysis

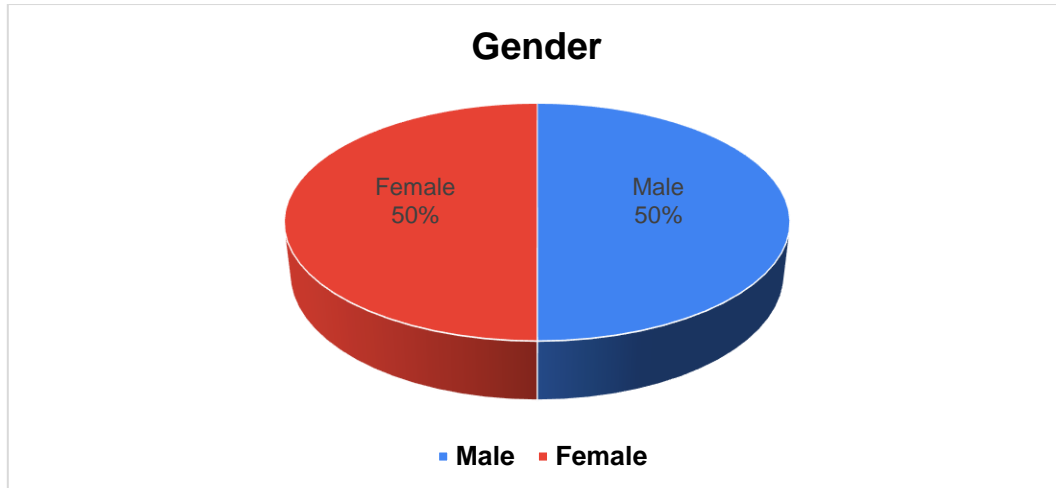
### 5.1 Data Analysis

To find out the outcome of the issue through a survey, a systematic questionnaire is created. A total of 70 respondents took part in the research. The respondents come from a variety of different cultures and backgrounds. MS Excel is being used to evaluate the data. The analysis and findings are as follows:

#### 5.1.1 Demographic Characteristics

##### 5.1.1.1 Gender

I have collected data from 70 respondents where 50% of the total respondents are male while 50% of the respondents are female. Both of them provided their opinion to complete the research.



*Figure 1: Gender Percentage of Respondents*

##### 5.1.1.2 Age

Here on this survey, 88.6% of the participants belong to the 20-30 age group, 4.3% of the participants belong to the 31-40 age group, 2.9% of the participants belong to the above 40 age group, and 4.30% of the participants belong to the 10-20 age groups.

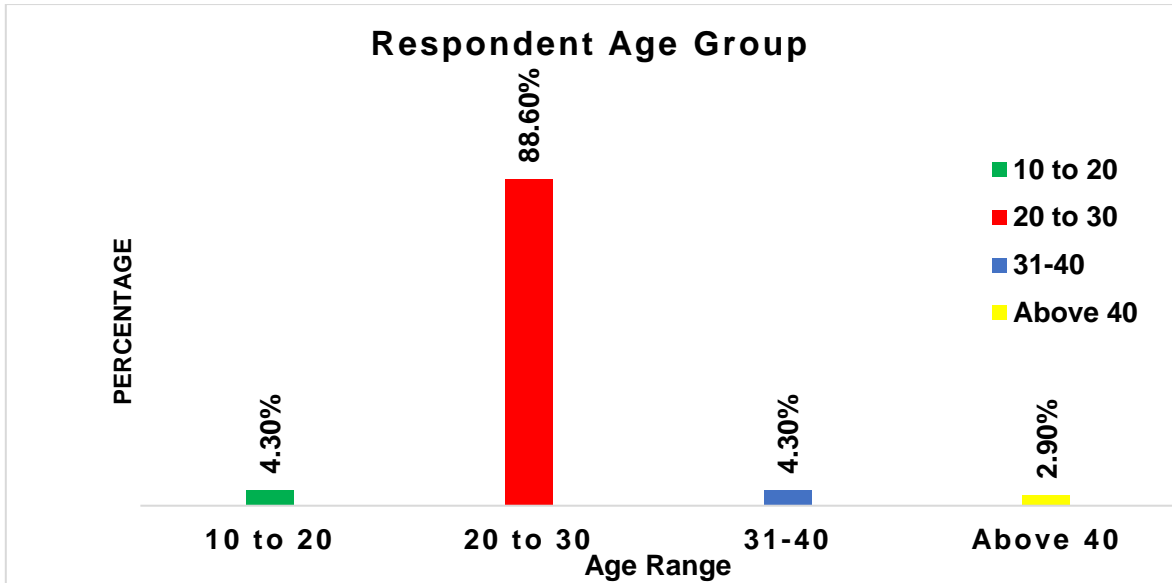


Figure 2: Age Group of Respondents

### 5.1.1.3 Income

55.7% of the respondents have income less than 10000, 18.6% of the total people are 10000-20000, 5.7% of the total people income are more than 40000, 10% of the total people income are 30001-40000 and rest 8% of the total people are 20001-30000.

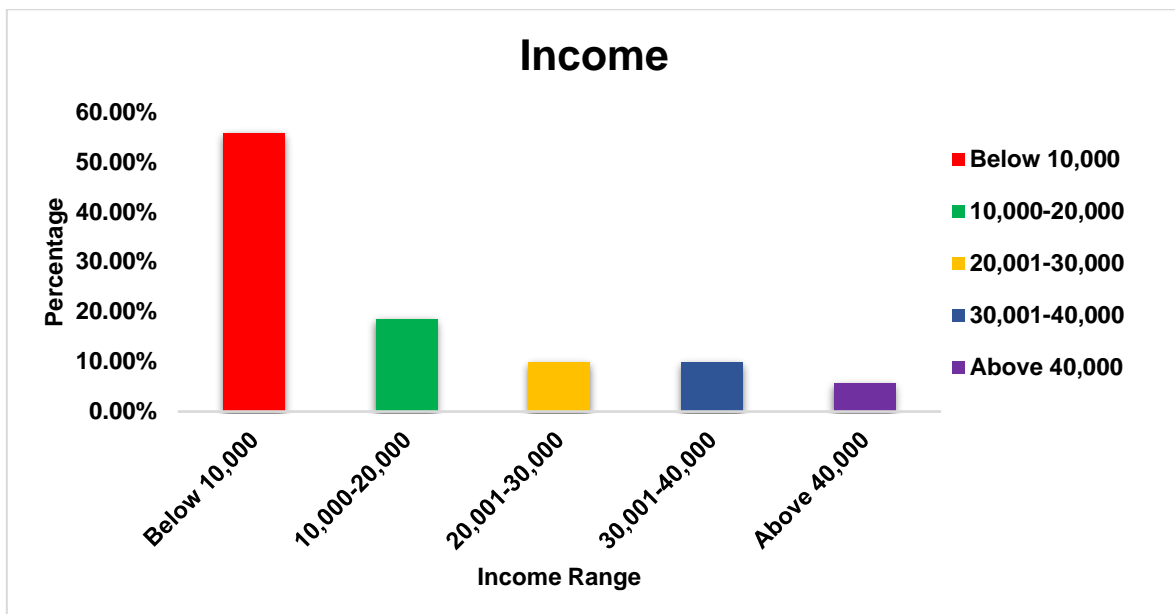


Figure 3: Income of Respondents

### 5.1.1.4 Occupation

I have found that 53% are students who are the major respondents of the survey, 11% are service holders; 13% are businessmen, 7% are housewives, 6% are doctors, 9% are employees and the other category are 1.4%.

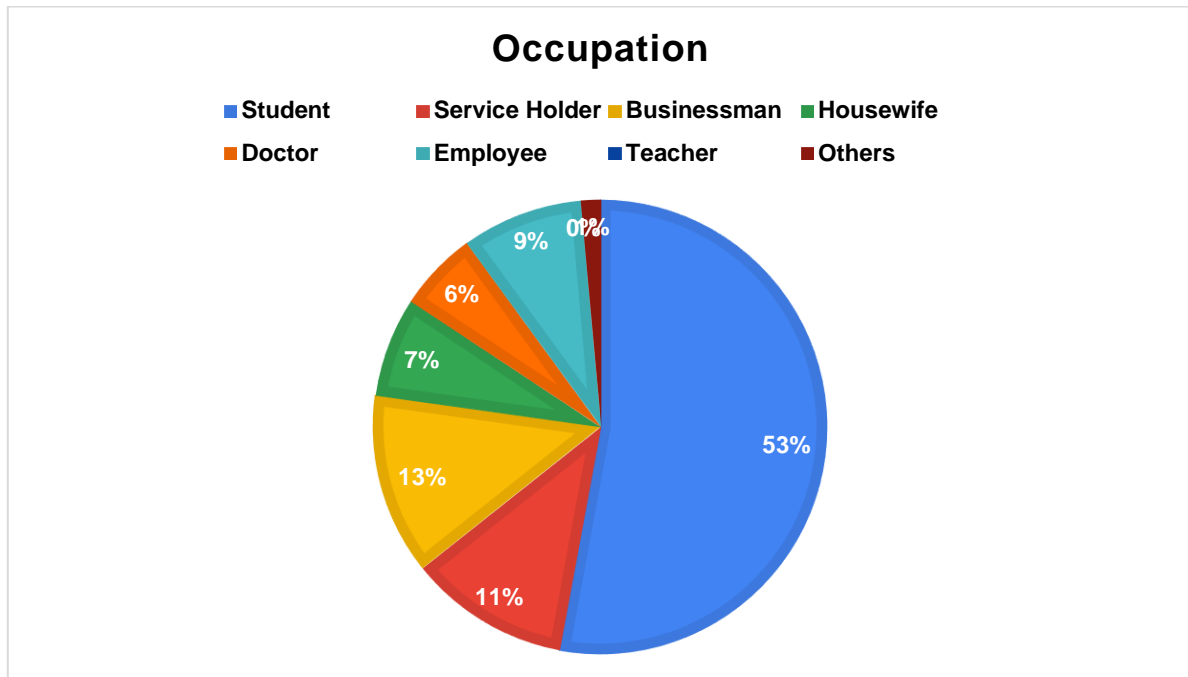


Figure 4: Occupation of the Respondents

## 5.1.2 Data on The Role of ICT in Tourism Development

### 5.1.2.1 Information Source

From my survey I have founded that 25% respondent find information before visiting a destination from online reviews, 26% from travel vlog which is the highest, 22% from friends & relatives, 15% from different travel related websites, 5% from newspaper, 4% from television and the rest 3% from other sources.

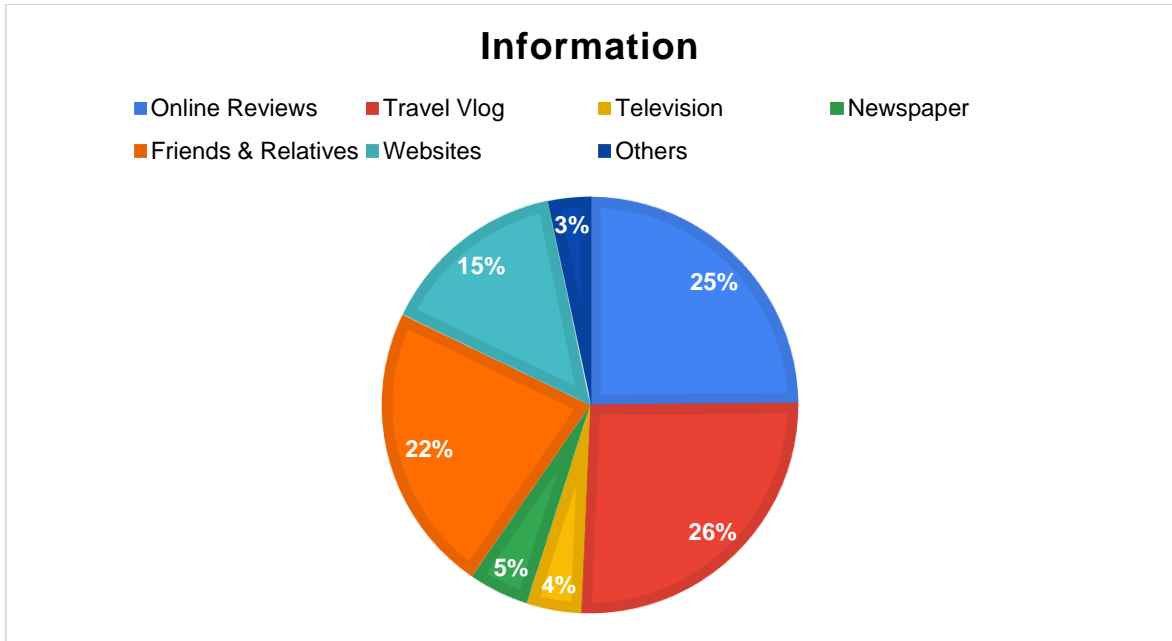


Figure 5: Sources of Information

### 5.1.2.2 Usage of Online Travelling Website

I have found from my research that 54% of the respondents have used online travelling websites and 46% have never used this platform.

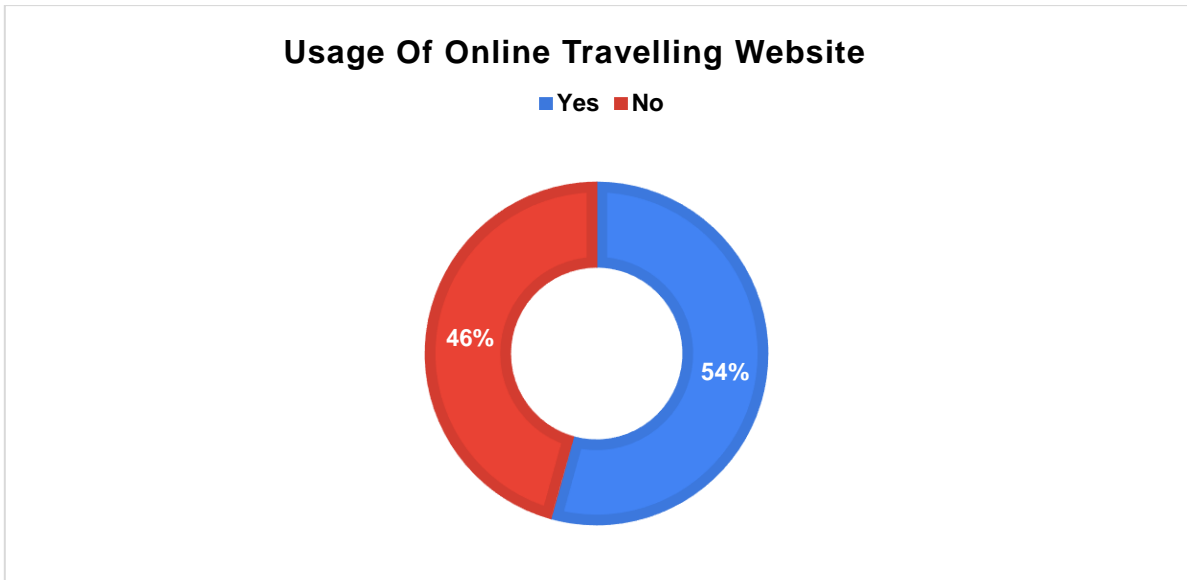


Figure 6: Usage Percentage of Online Travelling Website

### 5.1.2.3 Online Reservation System

From the 70 respondents I have found that 58% of the respondent agreed that online reservation system contributes to a great extent in easy and fast functioning tourism in Bangladesh which is the most, 23.3% responses strongly agree, 11.6% responses neutral, 4.3% disagreed and the rest 2.9% voted strongly disagree.

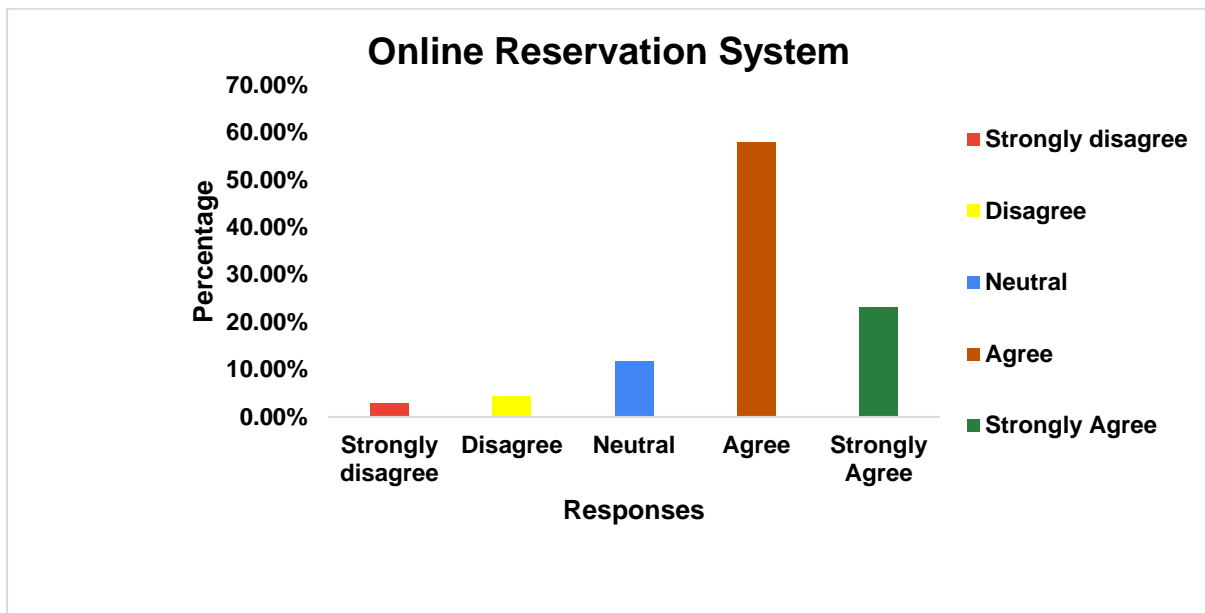
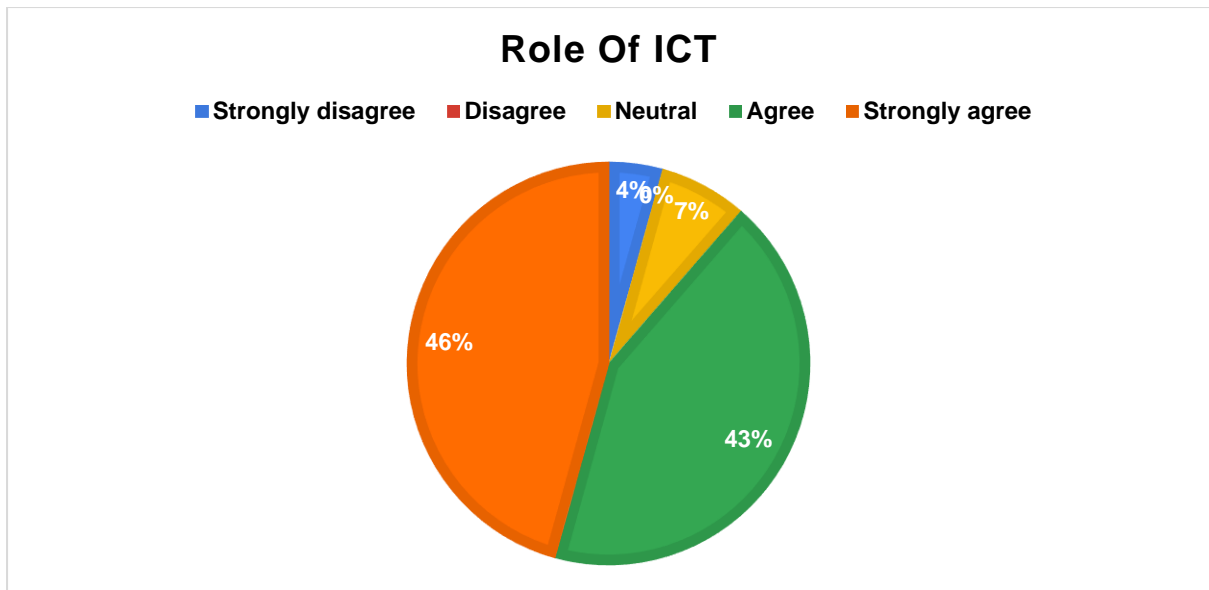


Figure 7: Contribution of Online Reservation System

### 5.1.2.4 Role of ICT

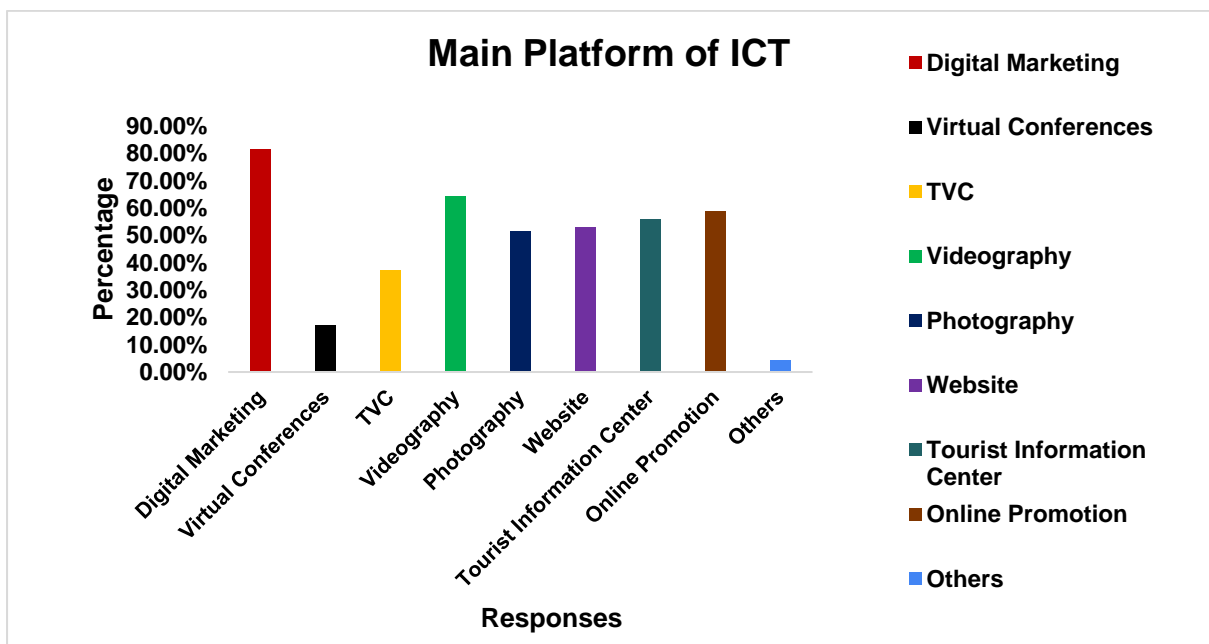
Among 70 respondents most people strongly agreed with the statement that ICT can play a major role in tourism development, 43% agreed, 7% voted and the rest 4% strongly disagreed.



*Figure 8: Role of ICT in Tourism Development*

#### 5.1.2.5 Main Platform of ICT in Tourism Development

Most of the respondent, 19% has voted that digital marketing is the main platform of ICT in tourism development, 15% videography, both tourist information center and website had 13% responses, 12% photography, 14% online promotion, 4% virtual conferences and the rest voted the other platform.



*Figure 9: Main Platform of ICT*



### 5.1.2.6 Information Provided by Bangladesh Tourism Board Website is Reliable

42.9% of respondents agreed that information provided by the Bangladesh Tourism Board or Beautiful Bangladesh website is more reliable or trustworthy, 35.7% response neutral, 10% strongly agree and the rest 11.40% disagree.

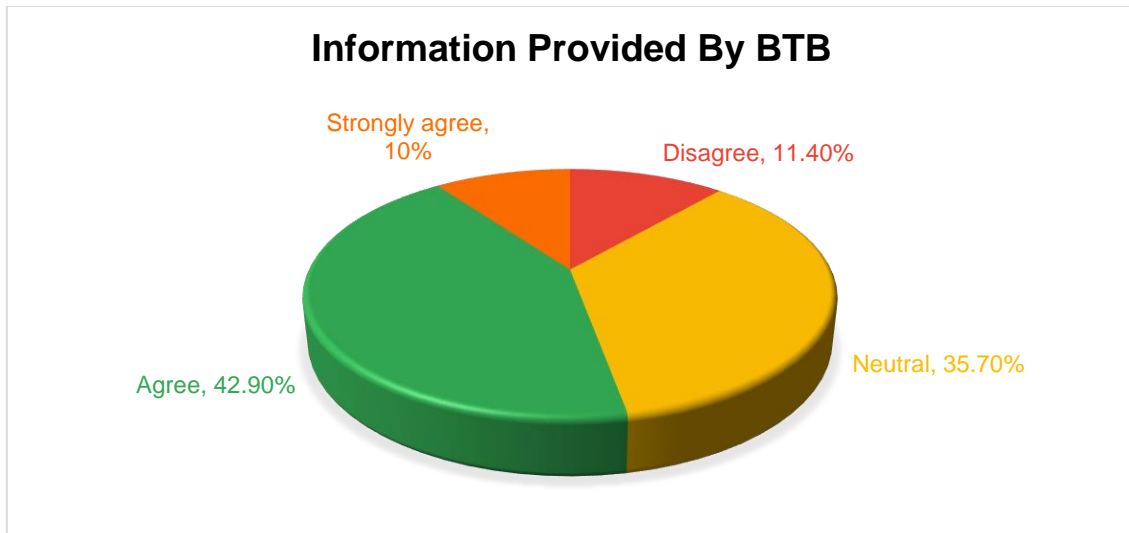


Figure 10: Information Provided by Bangladesh Tourism Board

### 5.1.2.7 The Level of Influence of ICT on Tourism

41.4% respondents voted on both very influential and influential on the level of influence of ICT on tourism. 14.3% neutral and the rest 2.9% not influential.

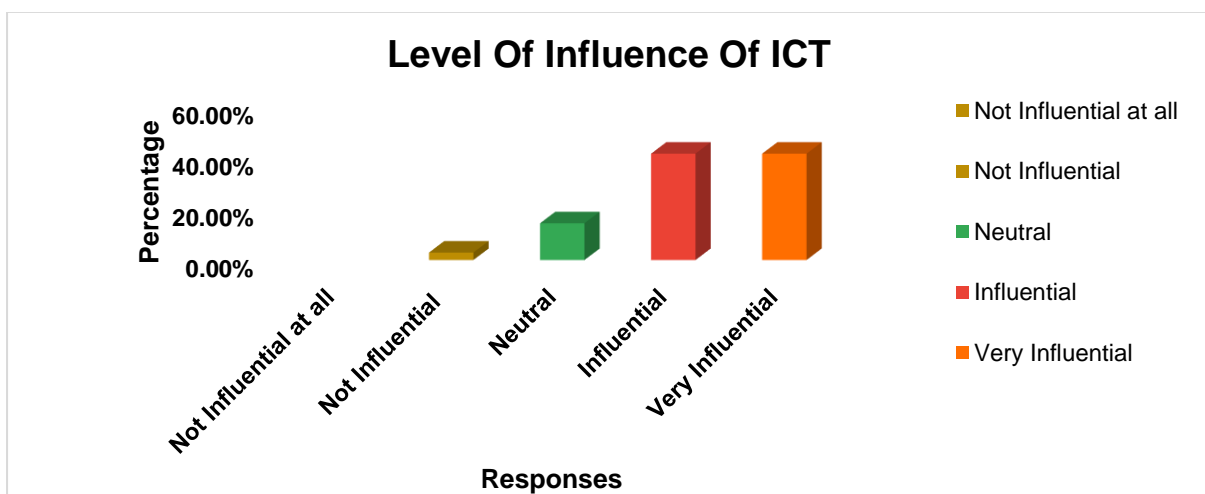


Figure 11: Level of Influence of ICT on Tourism

### 5.1.2.8 Impact of Bangladesh Tourism Board in Tourism Development Through ICT

Most of the people from the respondents, 43.5% agreed Bangladesh tourism Board, being a national tourism organization can make a real impact in tourism development through ICT. 29% strongly agreed, 18.8% neutral, 4.3% for both strongly disagree and disagree.

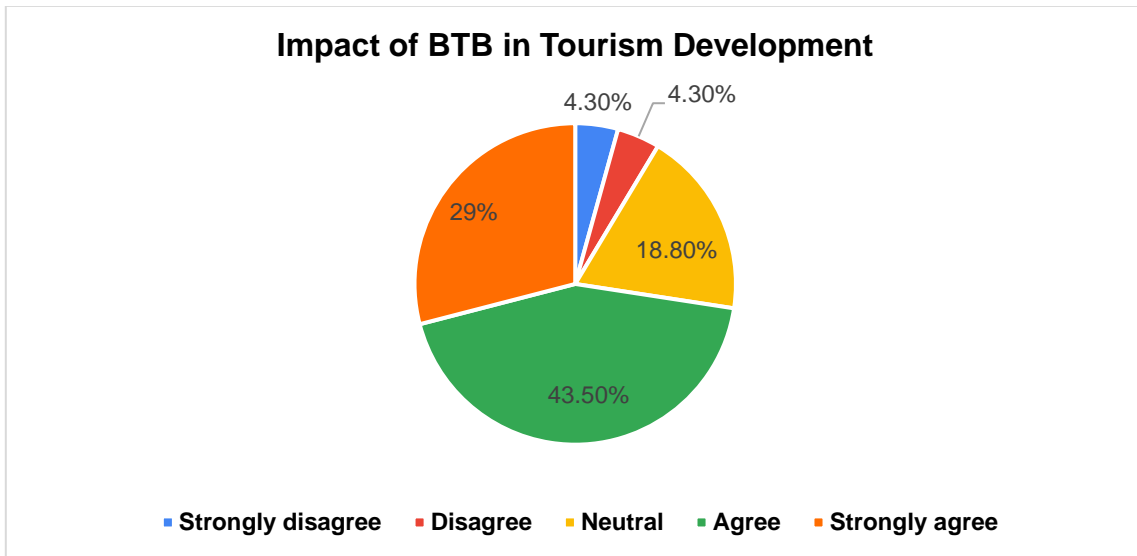


Figure 12: Impact of Bangladesh Tourism Board in Tourism Development Through ICT

### 5.1.2.9 Bangladesh Tourism Board’s initiative for development of tourism through ICT

42.9% agreed with the statement, 5.7% strongly agreed with the statement, 31.4% neutral, 12.9% disagreed the rest 7.1% strongly disagreed.

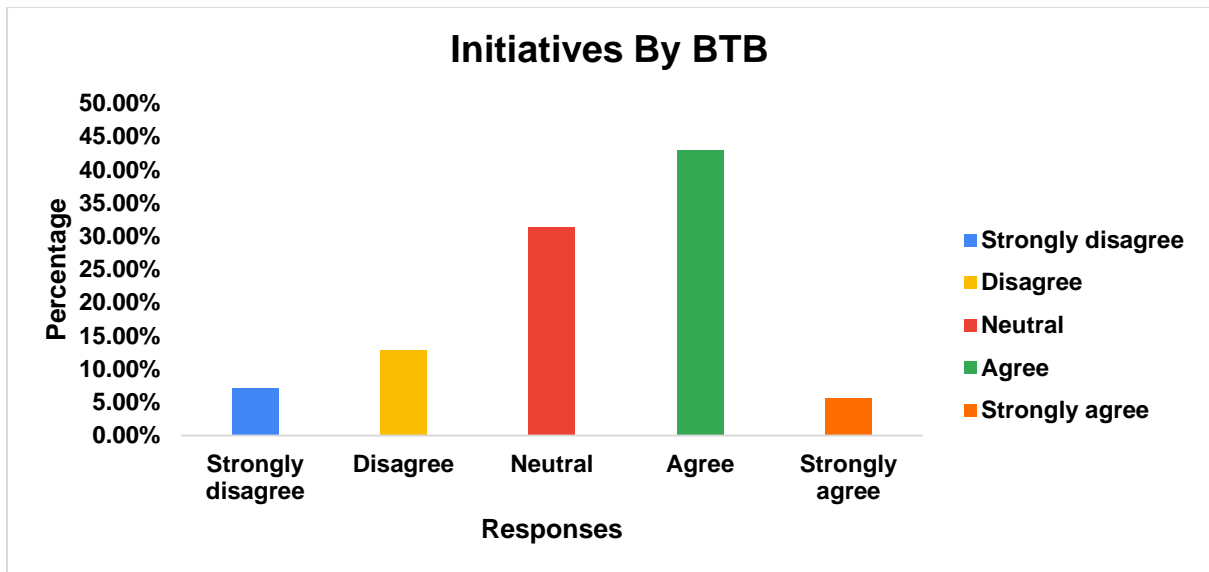


Figure 13: Bangladesh Tourism Board's Initiative

### 5.1.2.10 An App Can Be a Great Asset for the Tourism of Bangladesh

51.4% which the most agreed with the statement, 37.1% strongly agreed, 8.6% neutral and the rest 2.90% strongly disagreed with the statement.

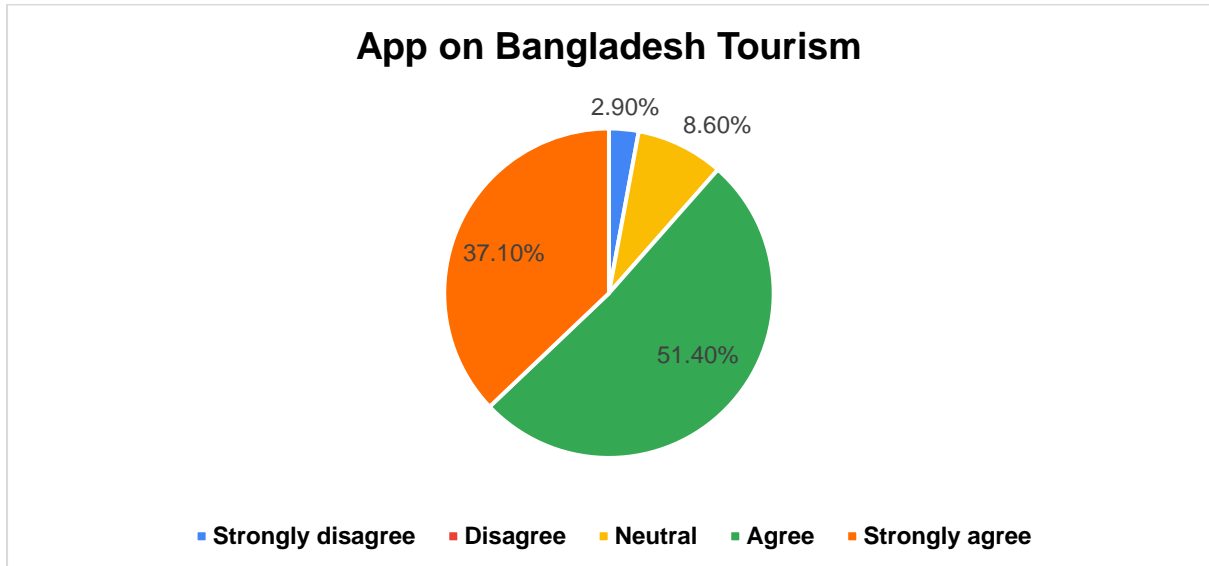
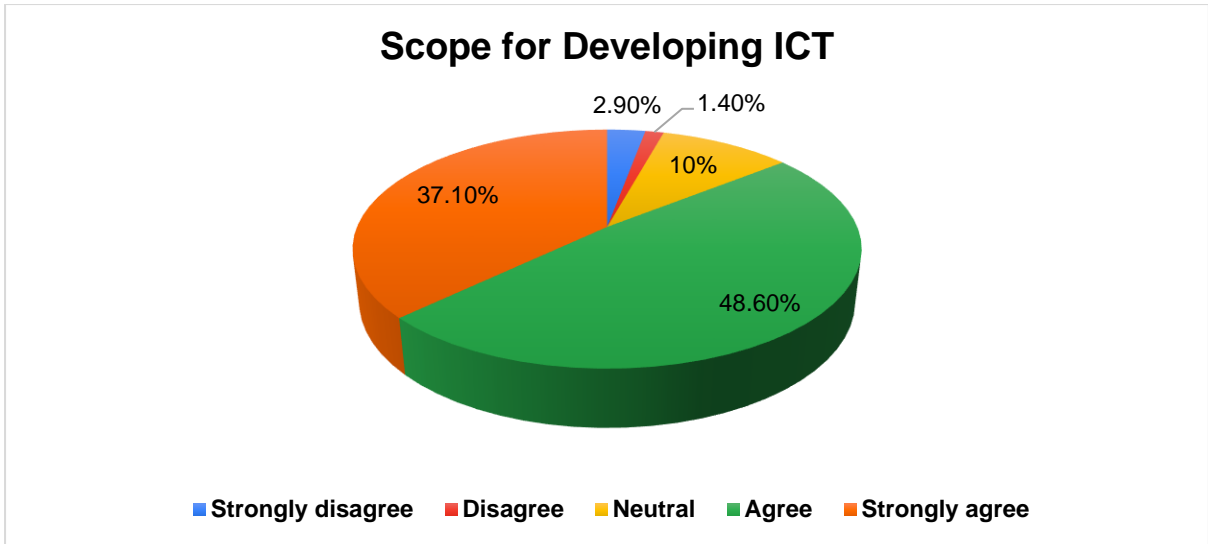


Figure 14: Response of App on Bangladesh Tourism

### 5.1.2.11 Scope for Developing ICT for Tourism Development

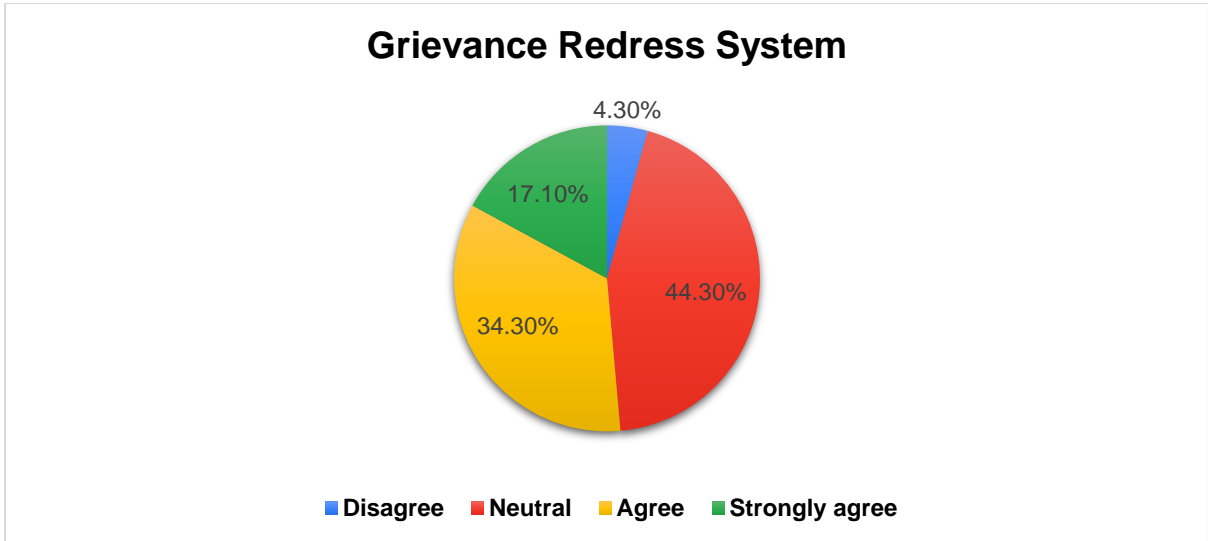
48.6% agreed with the statement that there are many scope for developing ICT areas for tourism development, 37.10% strongly agreed, 10% neutral, 1.4% disagreed, 2.9% strongly disagreed.



*Figure 15: Scope for Developing ICT Sector*

#### 5.1.2.12 Grievance Redress System Can Improve the Tourism Sector

Most of the respondents, 44.3% responded neutral, 34.3% agreed with the statement, 17.1% strongly agreed and the rest 4.3% responded disagree.



*Figure 16: Grievance Redress System in Tourism Improvement*

# **Chapter 6**

## **Findings, Recommendation & Conclusions**

## 6 Finding, Recommendations and Conclusion

### 6.1 Findings

Following my observations, findings from earlier chapters, and other investigations, I attempted to discover the following points:

- According to the collected statistics, people between the ages of 21-30 are the most eager and potential users of Information and Communication Technology. Most of them are students and also potential travelers.
- People only travel occasionally and find information about a particular destination before their tour through the use of Information and Communication Technology.
- Grievance Redress System is a new concept introduced by Bangladesh Tourism Board. That's why people or particularly tourists don't know about this concept and usage of it. But it can play a major role in tourism development.
- It is also found that digital marketing is the most significant way of promoting tourism of Bangladesh as a part of Information and Communication Technology tool.
- Information about different destinations of Bangladesh has been raised after increasing the use of Information and Communication Technology.
- Bangladesh Tourism Board is trying to implement Information and Communication Technology fully for the development of tourism. But it is not satisfactory.
- Tourists prefer to use smartphone apps to get destination knowledge, make hotel reservations, and check in and out.
- Both domestic and international tourists find information, particularly on social media.
- From the survey, it is found that most of the people think Information and Communication Technology can be very much influential for the tourism development of Bangladesh.
- Many web pages on Bangladesh tourism can provide proper information on the destinations.
- Information and Communication Technology implications on tourism can only be made if the whole country's ICT is fully improved. That's why the government's interventions are much needed.

## **6.2 Recommendations**

Based on the report's findings, the following recommendations for improving Bangladesh's tourism sector using ICT may be made:

- A fixed allocation for research activities and promotion should be established from annual expenses through Information and Communication Technology.
- Specific guidelines should be made particularly for Information and Communication Technology to implement it more in tourism development.
- More videography content, a strong website and interconnection between hotel and traveler should be made.
- Digital marketing to be used more efficiently to capture more of the international tourists' market.
- Informative apps should be developed which will help tourists find information about a particular place regarding accommodation, transportation, food and beverage etc.
- Information and Communication Technology should be used to increase the security of destinations. CCTV cameras at entry points, restaurants and other public areas would be good.
- Improve the websites with proper information that will be beneficial to the tourists.
- Information should be updated regularly so that tourists can prepare themselves in such a way.
- Search Engine Optimization (SEO) should be made more significantly in order to attract the target market.
- Highlighting positive reviews and features about the destination and reducing negativity about our country through social media and other online media to grab the global market more.
- An online Reservation System must be introduced in all hotels, motels, resorts and accommodation center.
- A centralized information hub should be established to control and provide all necessary information a tourist must seek before making a tour.

### **6.3 Conclusion**

According to studies, the latest concepts might be incorporated. Many nations have more advanced and updated technology than Bangladesh, which is deficient. In addition, the Bangladesh Tourism Board has lately made efforts to strengthen Information and Communication Technology in order to grow tourism and boost profitability. Tourism sector professionals are more conscious of the impact and value of Information and Communication Technology in the business. The Information and Communication Technology integration connects channel partners and customers into the same platform, allowing the company to grow and profit. The use of Information and Communication Technology throughout the channel helps to satisfy consumers' expectations for pre-booking hotels, flights, and other services in a faster and more efficient manner. The supply chain functions well to promote and expand tourism in terms of obtaining competitive advantage and profitability through the Information and Communication Technology Oriented Business Model. In the tourism industry, ICTs may be utilized for monitoring, forecasting, location identification, online payments, data collection, and management. To effectively employ ICT, a concerted effort is required to educate, train, and upgrade the tourist industry's services. Bangladesh Tourism Board must adequately prepare itself to make good use of the Internet and other enabling technologies in order to become the world's most desired destination. We also believe that an ICT-based business model is required to promote data integration across a wide range of industries.

The study's major aim was to determine and analyze the various functions of Information and Communication Technology in the growth of tourism as a business in Bangladesh. The study discovered many roles for ICT in the growth of Bangladesh's tourism market. Many organizations are attempting to increase their efficiency and potential by utilizing ICT. The researchers, on the other hand, attempted to develop a model that would depict the process of establishing customer loyalty through the usage of the internet.



# **Chapter 7**

## **References and Appendix**

## 7 References and Appendix

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## 7.2 Appendix

### Survey Questionnaire

**Dear Respondent,**

I am Md. Nayon Hossain, student of Daffodil International University (Department of Tourism and Hospitality Management). I am writing a report on the topic “**Role of Information and Communication Technology (ICT) in Tourism Development of Bangladesh: A Study on Bangladesh Tourism Board**”. This survey is done to derive information that would help me to furnish my internship report. I would be very kind to you if you accurately respond to the questionnaire.

Thank you for your time and effort to support my research.

**Gender:**  Male  Female

**Age:**  10-19  20-30  31-40  Above 40

**Occupation:**  Student  Service Holder  Businessman  Housewife  Doctor  
 Employee  Teacher  Others.....

**Income:**

- Below 10,000
- 10,000-20,000
- 21,000-30,000
- 30,000-40,000
- More than 40,000

**Educational Background:**

- SSC
- HSC
- BBA/BA/BSC
- MBA/MA/MSc
- Others

**1. How often do you travel?**

- Weekly once

- Weekly Twice
- Monthly
- Occasionally
- Holidays

**2. How do you find information about a particular tourist destination before your visit?  
[You can choose more than one option]**

- Online reviews
- Travel vlog
- Television
- Newspaper
- Friends & relatives
- Websites
- Others.....

**3. Have you ever used any online travelling website before a tour?**

- Yes
- No

If yes, how often

- None
- Often
- Sometimes
- Every time when I plan a travel

**4. Online reservation system contributes to a great extent in easy and fast functioning tourism in Bangladesh air travel, bus, rail, hotel stays etc.**

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**5. ICT can play a major role in the development of tourism industry**

- Strongly Disagree
- Disagree
- Neutral
- Agree

- Strongly Agree

**6. What can be the main platform of ICT in tourism development? [You can choose more than one option]**

- Digital Marketing
- Virtual Conferences
- TVC
- Videography
- Photography
- Website
- Tourist Information Center
- Online Promotion
- Others.....

**7. Being a national tourism organization, BTB can make a real impact in tourism development improving ICT sector**

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**8. Bangladesh Tourism Board is taking great initiatives for the development of tourism through ICT**

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**10. Information about holidays provided by Beautiful Bangladesh/BTB website is more reliable or trustworthy.**

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree



**11. The level of influence of ICT on Tourism**

- Not Influential at all
- Not Influential
- Neutral
- Influential
- Very influential

**12. An app on Bangladesh Tourism can be a great asset for the domestic and international tourists**

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**13. Grievance Redress System can improve the tourism and tourists' satisfaction**

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

**14. There are many scope for developing the ICT area in the tourism development of Bangladesh**

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

